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| 09/734,008      | 12/12/2000  | Uwe Heinelt          | 02481.1718          | 3747             |

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EXAMINER

SACKEY, EBENEZER O

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

1626


DATE MAILED: 04/17/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

|                                      |                                       |
|--------------------------------------|---------------------------------------|
| Application No.<br><b>09/734,008</b> | Applicant(s)<br><b>HEINELT ET AL.</b> |
| Examiner<br><b>EBENEZER SACKEY</b>   | Art Unit<br><b>1626</b>               |



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Jan 21, 2003
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 25, and 26 is/are rejected.
- 7) ☒ Claim(s) 4-24 and 27-50 is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-949)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No.(s). 16
- 4) ☐ Interview Summary (PTO-413) Paper No.(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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### **DETAILED ACTION**

Claims 1-50 are pending.

Receipt of the Information Disclosure Statement filed on 01/21/03 is acknowledged and has been entered into the file. The signed copy of the 1449 is attached herewith.

#### ***Request for Continued Examination***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, examination on the merits will occur. Applicant's submission filed on 01/21/03 has been entered.

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***Claim Rejections - 35 U.S.C. § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by F.

Bondavalli et al. "Synthesis and Pharmacological Activity of Derivatives of Exo-trimethylenenorbornane," *Il Farmaco-Edizione Scientifica*, Vol. 34, No. 11 (Nov 1979), pp. 945-951.

Applicants claim a substituted norbornylamino compound of formula (I) and (Ia). Bondavalli et al., discloses a substituted norbornylamino compound which is identical to the instantly claimed compound. See Table II, compound (Vd) on page 949.

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***Claim Rejections - 35 U.S.C. § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 2-3 and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over F. Bondavalli et al. "Synthesis and Pharmacological Activity of Derivatives of Exo-trimethylenenorbornane," *Il Farmaco-Edizione Scientifica*, Vol. 34, No. 11 (Nov 1979), pp. 945-951.

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Applicants claim a substituted norbornylamino compound of formula (I) and (Ia) having an exo-configured and an endo-fused five, six or seven membered ring. The substituents are as defined in claim 1.

Determination of the scope and content of the prior art (MPEP, §2141.01)

Bondavalli et al., discloses a substituted norbornylamino compound which is structurally similar to the instantly claimed compounds. See Table II, compound (Vd) on page 949 which corresponds to each of  $R_2$ ,  $R_3$  and  $R_4$  being  $(C_{1-4})$ -alkoxy;  $(C_{1-4})$ -alkoxy- $(C_{1-4})$ -alkyl.

Ascertainment of the difference between the prior art and the claims (MPEP, §2141.02)

The difference between the instant compounds and Bondavalli et al., is in the homologous nature of the compounds. See Table II, reference compound Vd on page 949 where each of  $R_2$ ,  $R_3$  and  $R_4$  are defined as  $(C_{1-4})$ -alkoxy;  $(C_{1-4})$ -alkoxy- $(C_{1-4})$ -alkyl etc. Additionally, the reference discloses that said compounds showed central nervous system depressant and anti-convulsant activity. See page 945. Thus, the use of the compound in treating central and peripheral nervous system ischemic state would be rendered obvious.

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*Finding of prima facie obviousness---rational and motivation (MPEP, §2142-2143)*

One of ordinary skill in the art would thus have been motivated to prepare compounds homologous to the compound of the reference with the expectation of obtaining additional compounds which are useful in the pharmaceutical industry. The claimed invention would be obvious from the use of similar compounds of the reference in treating disease state absent of any unobvious or unexpected properties especially since one of ordinary skill in the art would expect that structurally similar compounds would have the same or virtually the same properties. The instantly claimed compounds and methods of use would have been suggested to one of ordinary skill absent a showing of unexpected properties.

Claims 4-24 and 27-50 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to E. Sackey whose telephone

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number is (703) 305-6889. The examiner can normally be reached on Monday-Friday from 7:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. McKane, can be reached on (703) 308-4537. The fax phone number for this Group is (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1235.

EOS

April 11, 2003

A handwritten signature in cursive script, reading "Joseph K. McKane", is written over a horizontal line.

Joseph K. McKane

Supervisory Patent Examiner

Art Unit 1626, Group 1600

Technology Center 1